



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,221	08/13/2001	Stephen F. Gass	SDT 302	2131
27630	7590	09/07/2005	EXAMINER	
SD3, LLC 22409 S.W. NEWLAND ROAD WILSONVILLE, OR 97070			ASHLEY, BOYER DOLINGER	
			ART UNIT	PAPER NUMBER
			3724	
DATE MAILED: 09/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/929,221

Applicant(s)

GASS ET AL.

Examiner

Boyer D. Ashley

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10,12-14,16,17 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,9,17 and 19-24 is/are allowed.
- 6) ☒ Claim(s) 10,12-14 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/24/05; 6/4/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: 1449's-2/27/05; 12/19/04; 9/6/04.

Art Unit: 3724

## **DETAILED ACTION**

1. This office action is in response to applicant's amendment filed 6/23/05, wherein claim 1 was amended. Claims 1-6, 9-10, 12-14, 16-17, and 19-24 remain pending in the instant application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friemann et al., U.S. Patent 3,858,095, in view of Masuda et al., U.S. Patent 5,231,359.

Friemann et al. disclose the use of a woodworking machine with contact detection system and a reaction system for detection contact between the person and the tool such that the tool can be stopped. Friemann et al. disclose circuit arrangement with a capacitance type detection system, wherein the blade forms part of the circuit. Friemann et al. lacks the shaft rotating the blade as conductive plate and second plate spaced apart from the shaft wherein a dielectric is in between the plates.

Masuda discloses other types of capacitance detection system wherein a signal through an electrode is applied such that an electrode detector is used to sense a change in the capacitance in an object to be detected are equivalent structures known in the art. Therefore, because these two type of capacitance sensors are equivalent structures known in the art were art-recognized equivalents at the time the invention

Art Unit: 3724

was made, one of ordinary skill in the art would have found it obvious to substitute the detection system of Masuda for the detection system of Friemann et al. such that a signal is applied to the shaft and blade of Friemann et al. while also using an electrode to sense capacitance changes on the object due to a person touching the for the purpose of providing an enhanced detection system with high sensitive.

4. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lokey, U.S. Patent 3,785,230, in view of Masuda et al., U.S. Patent 5,231,359.

Lokey discloses the use of a woodworking machine with contact detection system and a reaction system for detection contact between the person and the tool such that the tool can be stopped. Lokey discloses a circuit arrangement with a capacitance type detection system, wherein the blade forms part of the circuit. Lokey lacks the shaft rotating the blade as conductive plate and second plate spaced apart from the shaft wherein a dielectric is in between the plates.

Masuda discloses other types of capacitance detection system wherein a signal through an electrode is applied such that an electrode detector is used to sense a change in the capacitance in an object to be detected are equivalent structures known in the art. Therefore, because these two type of capacitance sensors are equivalent structures known in the art were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the detection system of Masuda for the detection system of Lokey such that a signal is applied to the shaft and blade of Lokey while also using an electrode to sense

Art Unit: 3724

capacitance changes on the object due to a person touching the for the purpose of providing an enhanced detection system with high sensitive.

***Allowable Subject Matter***

5. Claims 1-6, 9, 17, 19, 20-24 appear to be allowable over the prior art of record.

6. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

7. Applicant's arguments filed 6/23/05 have been fully considered but they are not persuasive.

The rejections of claims 1-6, 9, 17, 19, and 20-24 have been withdrawn; however, the rejections of claims 10, 12-14 and 16 remain with the following comments for applicant's review.

Applicant contends that Masuda is non-analogous art; however, the examiner respectfully disagrees. The examiner does not believe Masuda is outside of applicant's field endeavor because applicant's field of endeavor has to include, besides cutting tools, electrical circuits that enable the cutting tools to function as intended. Further, Masuda must be reasonably pertinent to the problem addressed by the applicant because the applicant would have been interested in all prior art devices that increased detection times.

Applicant further contends that there is no motivation to combine the references. The examiner recognizes that obviousness can only be established by combining or

Art Unit: 3724

modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. However, It should be noted that the references need not expressly articulate reasons for combining references. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. Therefore, Friemann et al. and Masuda are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In this case, Friemann et al. and Masuda suggest using conducting cutting tools with contact detection systems with electrodes capacitively coupled to the cutting tool for the purpose of increasing the reaction times of the braking mechanisms. To apply such electrical device to a specific cutting tool would be within the abilities of one of ordinary skill.

Applicant contends that Lokey does not disclose a "contact" detection system; however, it should be noted that the phrase "a contact detection system adapted to detect contact between a person and the cutting tool" is not limited to direct touching between a person and the blade of the woodworking machine. The system only requires the ability to detect contact between a person and the cutting tool. Furthermore, the phrase "cutting tool" is not limited to a specific blade as it is sufficiently broad enough to include more structure than the blade itself.

8. For the reasons above, the grounds of rejection are deemed proper.

Art Unit: 3724

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

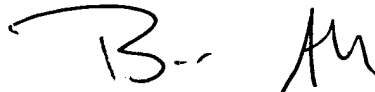
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boyer D. Ashley whose telephone number is 571-272-4502. The examiner can normally be reached on Monday-Thursday 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'B. Ashley'.

Boyer D. Ashley  
Primary Examiner  
Art Unit 3724

BDA  
September 5, 2005